

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-8 (Canceled).

Claim 9 (Previously Presented): An apparatus for producing microdroplets, comprising:

(a) a cross intersection portion at which a first continuous phase supplied from a continuous phase supply channel, a first dispersion phase supplied from a first dispersion phase supply channel, and a second dispersion phase supplied from a second dispersion phase supply channel intersect with each other;

(b) a first liquid feed device controlling the first dispersion phase;

(c) a second liquid feed device controlling the second dispersion phase; and

(d) a control device connected to the first liquid feed device and the second liquid feed device,

wherein (e) the first liquid feed device and the second liquid feed device are controlled by a signal from the control device so that microdroplets formed of the first dispersion phase and microdroplets formed of the second dispersion phase are sequentially produced.

Claim 10 (Canceled).

Claim 11 (Canceled).

Claim 12 (Currently Amended): The apparatus for producing microdroplets, according to Claim 9, wherein ~~by the signal from the control device,~~ microdroplets having uniform sizes and different components are alternately produced at a regular period.

Claim 13 (Canceled).

Claim 14 (Previously Presented): The apparatus for producing microdroplets, according to Claim 12, wherein by the signal from the control device, the period is changeable.

Claims 15-19 (Canceled).

Claim 20 (Currently Amended): An apparatus for producing microdroplets, comprising:

(a) a microdroplet producing portion producing first and second primary microdroplets and first ~~superfine~~ fine satellite ~~droplets~~ microdroplets produced together with the first primary microdroplets and second ~~superfine~~ fine satellite droplets produced together with the second primary microdroplets;

(b) a microdroplet supply channel supplying the first and second primary microdroplets and the first and second ~~superfine~~ fine satellite ~~droplets~~ microdroplets from the microdroplet producing portion;

(c) an expansion portion connected to the microdroplet supply channel; and

(d) a branching portion having a primary droplet recovery channel connected to a front end of the expansion portion to recover the first and the second primary microdroplets, a first ~~superfine~~ fine satellite droplet recovery channel positioned on one side of the primary

droplet recovery channel to recover the first ~~superfine~~ fine satellite droplets, and a second ~~superfine~~ fine satellite droplet recovery channel positioned on the other side of the primary droplet recovery channel to recover the second ~~superfine~~ fine satellite droplets.